



September 3, 2014

Mr. Daniel Dunlap
San Joaquin Cogen, LLC
2575 Park Lane, Suite 200
Lafayette, CO 80026

**Re: Notice of Minor Title V Permit Modification
District Facility # N-1027
Project # N-1142915**

Dear Mr. Dunlap:

Enclosed is the District's analysis of your application for minor Title V permit modification for the facility identified above. You proposed a Title V minor permit modification to incorporate recently issued N-1027-1-9 into the Title V operating permit. This permit is to designate 48.6 MW electric cogeneration plant as a compliant dormant emissions unit.

Enclosed is the engineering evaluation with the following attachments: proposed modified Title V permit, recently issued N-1027-1-9, emission increases, application, and previous Title V permit. This project will be subject to a 45-day EPA commenting period prior to the District taking final action.

If you have any questions, please contact Mr. Rupi Gill, Permit Services Manager, at (209) 557-6400.

Thank you for your cooperation in this matter.

Sincerely,


Arnaud Marjollet
Director of Permit Services

Enclosures

cc: Gerardo C. Rios, EPA (w/enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

Title V APPLICATION REVIEW Minor Modification

Facility Number: N-1027
Facility Name: San Joaquin Cogen, LLC
Mailing Address: 2575 Park Lane, Suite 200
Lafayette, CO 80026

Contact Name: Daniel Dunlap
Phone: (303) 607-5600

Responsible Official: Richard Olsen
Title: Vice President, Operations

Processing Staff: Jag Kahlon
Project Number: N-1142915
Date: August 19, 2014

I. PROPOSAL

San Joaquin Cogen, LLC has proposed to incorporate Authority to Construct (ATC) permit N-1027-1-9 into their Title V operating permit. This permit is to designate 48.6 MW electric cogeneration plant as a compliant dormant emissions unit. The facility has proposed to physically remove the inlet check valve on the natural gas compressor skid, thereby, interrupting the only gas source to the turbine, and will install blank flanges to seal the piping. This physical change will ensure that combustion cannot occur in the turbine while the unit is in dormant status.

The purpose of this document is to identify all applicable requirements, determine if the facility will comply with the applicable requirements, and to provide the legal and factual basis for permit requirements.

II. FACILITY LOCATION

This facility is located at 17200 Murphy Parkway, Lathrop, California.

III. EQUIPMENT DESCRIPTION

GENERAL ELECTRIC LM5000 NATURAL GAS FIRED GAS TURBINE ENGINE WITH STEAM INJECTION, AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION, AND AN OXIDATION CATALYST SERVING A 48.6 MW COGENERATION PLANT (COMPLIANT DORMANT EMISSION UNIT)

IV. SCOPE OF EPA AND PUBLIC REVIEW

The permitting action under which ATC N-1027-1-9 was issued did not trigger an SB-288 or Federal major modifications, and neither the permitting action included any relaxation to the existing monitoring, recordkeeping, or reporting requirements. Therefore, public review is not required for this project.

V. APPLICABLE REQUIREMENTS

Rule 2520 Federally Mandated Operating Permits (6/21/01)

VI. DESCRIPTION OF PROPOSED MODIFICATIONS

The following conditions are included in ATC N-1027-1-9 in addition to the requirements in Permit to Operate N-1027-1-8.

- The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520]
- While dormant, the fuel line shall remain physically disconnected. The disconnection shall be made by physically removing the inlet check valve on the natural gas compressor skid and installing blank flanges on both sides to seal the exposed piping. [District Rule 2080]
- Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
- While dormant, normal source testing shall not be required. [District Rule 2080]
- Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
- Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
- Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

All requirements in this permit are now Federally Enforceable through Title V permit.

Note that the applicant has already submitted a Title V package (TV Form 008 and 009) to incorporate N-1027-1-9 into Title V permit. Therefore, the first condition will not be included in the permit being issued under this project.

VII. COMPLIANCE

In accordance with Rule 2520, 3.20, the proposed project:

1. Do not violate requirements of any applicable federally enforceable local or federal requirement;
2. Do not relax monitoring, reporting, or recordkeeping requirements in the permit and are not significant changes in existing monitoring permit terms or conditions;
3. Do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
4. Do not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include;
 - a. A federally enforceable emission cap assumed to avoid classification as a modification under any provisions of Title I of the Federal Clean Air Act; and
 - b. An alternative emissions limit approved pursuant to regulations promulgated under section 112(i)(5) of the Federal Clean Air Act;
5. Are not Title I modifications as defined in District Rule 2520 or modifications as defined in section 111 or 112 of the Federal Clean Air Act; and
6. Do not seek to consolidate overlapping applicable requirements.

In accordance with Rule 2520, the application meets the procedural requirements of section 11.4 by including;

1. A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs (Appendix IV) ;

2. The source's suggested draft permit (Appendix I); and
3. Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used (Appendix III).

Compliance is expected with this Rule.

APPENDICES

Appendix I:	Proposed Title V Operating Permit No. N-1027-1-10
Appendix II:	Authority to Construct N-1027-1-9
Appendix III:	Permit Application
Appendix IV:	Emissions Change
Appendix V:	Current Permit to Operate N-1027-1-8

Appendix I
Proposed Title V Operating Permit No. N-1027-1-10

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1027-1-10

EXPIRATION DATE: 07/31/2019

EQUIPMENT DESCRIPTION:

GENERAL ELECTRIC LM5000 NATURAL GAS FIRED GAS TURBINE ENGINE WITH STEAM INJECTION, AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION, AND AN OXIDATION CATALYST SERVING A 48.6 MW COGENERATION PLANT (COMPLIANT DORMANT EMISSION UNIT)

PERMIT UNIT REQUIREMENTS

1. While dormant, the fuel line shall remain physically disconnected. The disconnection shall be made by physically removing the inlet check valve on the natural gas compressor skid and installing blank flanges on both sides to seal the exposed piping. [District Rule 2080] Federally Enforceable Through Title V Permit
2. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080] Federally Enforceable Through Title V Permit
3. While dormant, normal source testing shall not be required. [District Rule 2080] Federally Enforceable Through Title V Permit
4. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080] Federally Enforceable Through Title V Permit
5. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080] Federally Enforceable Through Title V Permit
6. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
7. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8 (c)] Federally Enforceable Through Title V Permit
8. Startup or shutdown periods is the time during which the exhaust gas is not within the normal operating temperature range. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703] Federally Enforceable Through Title V Permit
9. The SCR system shall have an effective catalyst volume of at least 904 cubic feet at all times. [District NSR Rule and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
10. The gas turbine shall be equipped with an automatic air/fuel ratio control system. [District NSR Rule] Federally Enforceable Through Title V Permit
11. Emissions from the gas turbine shall not exceed any of the following limits: 80 lbs-PM10/day, 148 lbs-NOx/day as (NO2), 7 lbs-SOx/day as (SO2), 289 lbs-CO/day and 93 lbs-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. NO_x emission concentrations from the gas turbine exhaust stack shall not exceed 3.8 ppmv dry calculated to 15% O₂, except during periods of startup and shutdown as defined in this permit. [District NSR Rule; District Rule 4703, 5.1; and 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
13. CO emissions concentrations from the gas turbine exhaust stack shall not exceed 12 ppmv dry calculated to 15% O₂, except during periods of startup and shutdown as defined in this permit. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
14. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
15. Results of the CEM system shall meet all applicable requirements of CFR 60.13. [40 CFR 60.13] Federally Enforceable Through Title V Permit
16. NO_x emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance all applicable requirements of 40 CFR Part 60. CO, PM₁₀, VOC and SO_x emissions concentrations measured for compliance shall be averaged over a 15-minute sampling period. [District Rule 1081, 4.0] Federally Enforceable Through Title V Permit
17. The ammonia slip shall not exceed 20 ppmv dry at 15% O₂. [District NSR Rule] Federally Enforceable Through Title V Permit
18. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13 (h)] Federally Enforceable Through Title V Permit
19. The selective catalytic reduction (SCR) system shall be installed in the path of the heat recovery boiler where the temperature range is 575 to 750°F. The temperature of the exhaust gas leaving the catalytic oxidation reduction (COR) system shall be greater than 600°F at all times, except during periods of startup or shutdown. [District NSR Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
20. The owner or operator shall measure and record flue gas temperature leaving the COR system during each source test while measuring VOC emissions. [40 CFR Part 64] Federally Enforceable Through Title V Permit
21. This unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(b) and San Joaquin County Rule 407] Federally Enforceable Through Title V Permit
22. The sulfur content of each fuel source shall be documented in a current valid purchase contract, a supplier certification, tariff or transportation contract, or tested daily in accordance with the requirements of 40 CFR 60.334 (h) and (i). [40 CFR 60.334(h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit
23. If the sulfur content of the natural gas being fired in the turbine is determined using daily testing, then ASTM D1072, D3246, D4468, or D6667 shall be used to make this determination. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
24. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with U.S. EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The stack height shall be minimum of 50 feet and shall be adequate for stack sampling pursuant to EPA reference methods for source testing. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [40 CFR Part 60; District NSR Rule; District Rule 4703; District Rule 1081, 3.0, 5.0, and 6.0] Federally Enforceable Through Title V Permit
25. Source testing for NO_x, CO, VOC and ammonia slip shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
26. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days after testing day. [District Rule 1081] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

27. {2268} The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry). EPA Methods 7E or 20 shall be used for NO_x emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit
28. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with CEMS for NO_x, CO, and O₂. CEMS shall meet the performance specification requirements in 40 CFR Part 60, Appendix F, 40 CFR Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the U.S. EPA. CEMS data shall be used to determine compliance with emission limits. [District Rule 1080, 4.0 and 5.0; District NSR Rule, District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
29. A CEMS system shall be used to demonstrate compliance with the NO_x emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [40 CFR 60.335] Federally Enforceable Through Title V Permit
30. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080, 6.0 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
31. All continuous monitoring and recording instruments shall be installed, calibrated, operated and shall be reported in accordance with the requirements of 40 CFR, Part 51. [District NSR Rule and District Rule 4001] Federally Enforceable Through Title V Permit
32. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
33. {2250} The continuous NO_x and O₂ monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit
34. {2251} The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
35. On days of turbine engine startup/shutdown, permittee shall demonstrate compliance with NO_x and CO daily emissions limits with CEMS data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstration shall be maintained and made available for District inspection for a period of five years. [District Rule 1080, 7.1; District NSR Rule; District Rule 2520, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
36. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation while the turbine is operating. NO_x emissions in ppmv (corrected to 15% O₂) and CO and O₂ concentrations must be recorded continuously (except as noted elsewhere) and data shall be reduced to 15-minute averages per 40 CFR Part 60.13 (e)(2). [District NSR Rule, 40 CFR 60.13] Federally Enforceable Through Title V Permit
37. Records shall be maintained and shall contain the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080; emission measurements; and daily actual local startup and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 1080, 4.0 and 7.3; District NSR Rule; District Rule 4703; 40 CFR 60.332(a), (b); 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

38. Permittee shall maintain on file copies of natural gas bills. Certification of the sulfur content by the gas supplier on the Fuel Gas Tariff will be an acceptable alternative for verifying compliance with fuel sulfur limit. [40 CFR 60.334 (b); 40 CFR 60.334(h)(3) ; District NSR Rule; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
39. Operators of CEMS shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken, and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEMS was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. For clarification, operator shall use the same averaging periods as written into the permit for demonstrating compliance. [40 CFR 60.7(c); District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
40. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMS within 96 hours of occurrence. The APCO shall be notified within eight hours after the detection of a breakdown of CEMS monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment greater than 4 hours in duration. [40 CFR 60.334(c); District Rule 1080, 9.0 and 10.0; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
41. The permittee shall provide a continuous temperature monitoring and recording system to indicate the flue gas temperature through the SCR and COR systems. [District NSR Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
42. A daily log of the hourly ammonia injection rate and of the pressure drop across the catalyst shall be maintained on the premises at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
43. {1711} The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
44. There shall be no visible emissions (except for uncombined water) from the entire system. [District NSR Rule] Federally Enforceable Through Title V Permit
45. The turbine shall be designed and operated at STIG (Trademark GE) conditions in accordance with manufacture's recommended operating procedures. [District NSR Rule, 40 CFR Part 64] Federally Enforceable Through Title V Permit
46. Per the Settlement Agreement entered into as of 06/22/1989, by and between California Attorney General John Van de Kamp and San Joaquin CoGen LLC, San Joaquin CoGen LLC is required to mitigate permitted emissions of PM10 to 0 lb/day & NOx to 85 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
47. Turbine washing operation shall take place only when the turbine is off-line. [District NSR Rule] Federally Enforceable Through Title V Permit
48. VOC emissions from the off-line turbine wash operation shall not exceed 9.8 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
49. Records of daily amount of organic solvent used, Material Safety Data Sheet (MSDS) or product data sheet showing the name of the organic solvent, chemical composition, boiling point, and VOC content, mix ratios by volume of components added to the cleaning solvent, shall be maintained, retained on the premises for at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

50. Compliance with permit conditions in the Title V permit shall be deemed compliance with the 40 CFR 60.332(c), 60.333 (a) and (b); 60.334(b), (b)(1), (b)(2), (b)(3), (h)(1), (i), (j); 60.335(b)(10). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
51. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

DRAFT

These terms and conditions are part of the Facility-wide Permit to Operate.

Appendix II
Authority to Construct N-1027-1-9



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT



AUTHORITY TO CONSTRUCT

PERMIT NO: N-1027-1-9

ISSUANCE DATE: 08/12/2014

LEGAL OWNER OR OPERATOR: SAN JOAQUIN COGEN, LLC
MAILING ADDRESS: 2575 PARK LN - STE 200
LAFAYETTE, CO 80026-3200

LOCATION: 17200 MURPHY PARKWAY
LATHROP, CA 95330

EQUIPMENT DESCRIPTION:

MODIFICATION OF GENERAL ELECTRIC LM5000 NATURAL GAS FIRED GAS TURBINE ENGINE WITH STEAM INJECTION, AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION, AND AN OXIDIZATION CATALYST SERVING A 48.6 MW COGENERATION PLANT: DESIGNATE AS A COMPLIANT DORMANT EMISSIONS UNIT

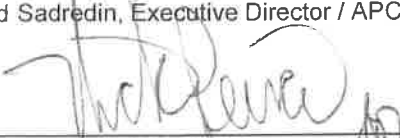
CONDITIONS

1. The facility shall submit an application to modify the Title V permit in accordance with the timeframes and procedures of District Rule 2520. [District Rule 2520] Federally Enforceable Through Title V Permit
2. While dormant, the fuel line shall remain physically disconnected. The disconnection shall be made by physically removing the inlet check valve on the natural gas compressor skid and installing blank flanges on both sides to seal the exposed piping. [District Rule 2080]
3. Permittee shall submit written notification to the District upon designating the unit as dormant or active. [District Rule 2080]
4. While dormant, normal source testing shall not be required. [District Rule 2080]
5. Upon recommencing operation of this unit, normal source testing shall resume. [District Rule 2080]
6. Any source testing required by this permit shall be performed within 60 days of recommencing operation of this unit, regardless of whether the unit remains active or is again designated as dormant. [District Rule 2080]
7. Records of all dates and times that this unit is designated as dormant or active, and copies of all corresponding notices to the District, shall be maintained, retained for a period of at least five years, and made available for District inspection upon request. [District Rule 1070]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO


Arnaud Marjollet, Director of Permit Services

N-1027-1-9 Aug 12 2014 2:30PM - KAHLOJ Joint Inspection NOT Required

8. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8 (c)] Federally Enforceable Through Title V Permit
9. Startup or shutdown periods is the time during which the exhaust gas is not within the normal operating temperature range. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703] Federally Enforceable Through Title V Permit
10. The SCR system shall have an effective catalyst volume of at least 904 cubic feet at all times. [District NSR Rule and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
11. The gas turbine shall be equipped with an automatic air/fuel ratio control system. [District NSR Rule] Federally Enforceable Through Title V Permit
12. Emissions from the gas turbine shall not exceed any of the following limits: 80 lbs-PM10/day, 148 lbs-NOx/day as (NO2), 7 lbs-SOx/day as (SO2), 289 lbs-CO/day and 93 lbs-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
13. NOx emission concentrations from the gas turbine exhaust stack shall not exceed 3.8 ppmv dry calculated to 15% O2, except during periods of startup and shutdown as defined in this permit. [District NSR Rule; District Rule 4703, 5.1; and 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
14. CO emissions concentrations from the gas turbine exhaust stack shall not exceed 12 ppmv dry calculated to 15% O2, except during periods of startup and shutdown as defined in this permit. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
15. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
16. Results of the CEM system shall meet all applicable requirements of CFR 60.13. [40 CFR 60.13] Federally Enforceable Through Title V Permit
17. NOx emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance all applicable requirements of 40 CFR Part 60. CO, PM10, VOC and SOx emissions concentrations measured for compliance shall be averaged over a 15-minute sampling period. [District Rule 1081, 4.0] Federally Enforceable Through Title V Permit
18. The ammonia slip shall not exceed 20 ppmv dry at 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit
19. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13 (h)] Federally Enforceable Through Title V Permit
20. The selective catalytic reduction (SCR) system shall be installed in the path of the heat recovery boiler where the temperature range is 575 to 750°F. The temperature of the exhaust gas leaving the catalytic oxidation reduction (COR) system shall be greater than 600°F at all times, except during periods of startup or shutdown. [District NSR Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
21. The owner or operator shall measure and record flue gas temperature leaving the COR system during each source test while measuring VOC emissions. [40 CFR Part 64] Federally Enforceable Through Title V Permit
22. This unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(b) and San Joaquin County Rule 407] Federally Enforceable Through Title V Permit
23. The sulfur content of each fuel source shall be documented in a current valid purchase contract, a supplier certification, tariff or transportation contract, or tested daily in accordance with the requirements of 40 CFR 60.334 (h) and (i). [40 CFR 60.334(h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit

24. If the sulfur content of the natural gas being fired in the turbine is determined using daily testing, then ASTM D1072, D3246, D4468, or D6667 shall be used to make this determination. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
25. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with U.S. EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The stack height shall be minimum of 50 feet and shall be adequate for stack sampling pursuant to EPA reference methods for source testing. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [40 CFR Part 60; District NSR Rule; District Rule 4703; District Rule 1081, 3.0, 5.0, and 6.0] Federally Enforceable Through Title V Permit
26. Source testing for NO_x, CO, VOC and ammonia slip shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
27. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days after testing day. [District Rule 1081] Federally Enforceable Through Title V Permit
28. The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry). EPA Methods 7E or 20 shall be used for NO_x emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit
29. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with CEMS for NO_x, CO, and O₂. CEMS shall meet the performance specification requirements in 40 CFR Part 60, Appendix F, 40 CFR Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the U.S. EPA. CEMS data shall be used to determine compliance with emission limits. [District Rule 1080, 4.0 and 5.0; District NSR Rule, District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
30. A CEMS system shall be used to demonstrate compliance with the NO_x emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [40 CFR 60.335] Federally Enforceable Through Title V Permit
31. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080, 6.0 and 40 CFR Part 60] Federally Enforceable Through Title V Permit
32. All continuous monitoring and recording instruments shall be installed, calibrated, operated and shall be reported in accordance with the requirements of 40 CFR, Part 51. [District NSR Rule and District Rule 4001] Federally Enforceable Through Title V Permit
33. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
34. The continuous NO_x and O₂ monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit
35. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit

36. On days of turbine engine startup/shutdown, permittee shall demonstrate compliance with NO_x and CO daily emissions limits with CEMS data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstration shall be maintained and made available for District inspection for a period of five years. [District Rule 1080, 7.1; District NSR Rule; District Rule 2520, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
37. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation while the turbine is operating. NO_x emissions in ppmv (corrected to 15% O₂) and CO and O₂ concentrations must be recorded continuously (except as noted elsewhere) and data shall be reduced to 15-minute averages per 40 CFR Part 60.13 (e)(2). [District NSR Rule, 40 CFR 60.13] Federally Enforceable Through Title V Permit
38. Records shall be maintained and shall contain the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080; emission measurements; and daily actual local startup and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 1080, 4.0 and 7.3; District NSR Rule; District Rule 4703; 40 CFR 60.332(a), (b); 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
39. Permittee shall maintain on file copies of natural gas bills. Certification of the sulfur content by the gas supplier on the Fuel Gas Tariff will be an acceptable alternative for verifying compliance with fuel sulfur limit. [40 CFR 60.334 (b); 40 CFR 60.334(h)(3) ; District NSR Rule; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
40. Operators of CEMS shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken, and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEMS was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. For clarification, operator shall use the same averaging periods as written into the permit for demonstrating compliance. [40 CFR 60.7(c); District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
41. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMS within 96 hours of occurrence. The APCO shall be notified within eight hours after the detection of a breakdown of CEMS monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment greater than 4 hours in duration. [40 CFR 60.334(c); District Rule 1080, 9.0 and 10.0; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
42. The permittee shall provide a continuous temperature monitoring and recording system to indicate the flue gas temperature through the SCR and COR systems. [District NSR Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
43. A daily log of the hourly ammonia injection rate and of the pressure drop across the catalyst shall be maintained on the premises at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
44. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
45. There shall be no visible emissions (except for uncombined water) from the entire system. [District NSR Rule] Federally Enforceable Through Title V Permit

46. The turbine shall be designed and operated at STIG (Trademark GE) conditions in accordance with manufacture's recommended operating procedures. [District NSR Rule, 40 CFR Part 64] Federally Enforceable Through Title V Permit
47. Per the Settlement Agreement entered into as of 06/22/1989, by and between California Attorney General John Van de Kamp and San Joaquin CoGen LLC, San Joaquin CoGen LLC is required to mitigate permitted emissions of PM10 to 0 lb/day & NOx to 85 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
48. Turbine washing operation shall take place only when the turbine is off-line. [District NSR Rule] Federally Enforceable Through Title V Permit
49. VOC emissions from the off-line turbine wash operation shall not exceed 9.8 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
50. Records of daily amount of organic solvent used, Material Safety Data Sheet (MSDS) or product data sheet showing the name of the organic solvent, chemical composition, boiling point, and VOC content, mix ratios by volume of components added to the cleaning solvent, shall be maintained, retained on the premises for at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
51. Compliance with permit conditions in the Title V permit shall be deemed compliance with the 40 CFR 60.332(c), 60.333 (a) and (b); 60.334(b), (b)(1), (b)(2), (b)(3), (h)(1), (i), (j); 60.335(b)(10). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
52. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

Appendix III
Permit Application



San Joaquin Valley Air Pollution Control District

www.valleyair.org



Permit Application For:

[] ADMINISTRATIVE AMENDMENT [X] MINOR MODIFICATION [] SIGNIFICANT MODIFICATION

1. PERMIT TO BE ISSUED TO: San Joaquin Cogen, LLC	
2. MAILING ADDRESS: STREET/P.O. BOX: <u>2575 Park Lane, Suite 200</u> CITY: <u>Lafayette</u> STATE: <u>CO</u> 9-DIGIT ZIP CODE: <u>80026</u>	
3. LOCATION WHERE THE EQUIPMENT WILL BE OPERATED: STREET: <u>17200 Murphy Parkway</u> CITY: <u>Lathrop</u> 1/4 SECTION _____ TOWNSHIP _____ RANGE _____	INSTALLATION DATE:
4. GENERAL NATURE OF BUSINESS: Power Generation	
5. DESCRIPTION OF EQUIPMENT OR MODIFICATION FOR WHICH APPLICATION IS MADE (include Permit #'s if known, and use additional sheets if necessary) Request modification of Title V Permit for Facility N-1027 to classify the GE LM5000 Gas Turbine Engine at the facility as a Dormant Emission Unit.	
6. TYPE OR PRINT NAME OF APPLICANT: Daniel Dunlap	TITLE OF APPLICANT: Senior Director, Regulatory Affairs
7. SIGNATURE OF APPLICANT: 	DATE: 15 August 2014 PHONE: (303) 607-5600 FAX: () EMAIL: ddunlap@coloradoenergy.com

For APCD Use Only:

DATE STAMP RECEIVED AUG 15 2014 SJVAPCD NORTHERN REGION	FILING FEE RECEIVED \$ <u>0</u> CHECK#: _____ DATE PAID: _____ PROJECT NO: <u>N1142915</u> FACILITY ID: <u>N-1027</u>
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Central Regional Office • 1990 E. Gettysburg Avenue • Fresno, CA 93726-0244 • (559) 230-5900 • FAX (559) 230-6061

**San Joaquin Valley
Unified Air Pollution Control District**

TITLE V MODIFICATION - COMPLIANCE CERTIFICATION FORM

I. TYPE OF PERMIT ACTION (Check appropriate box)

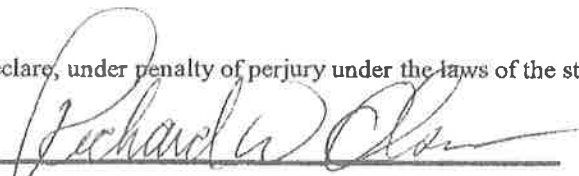
- ☐ SIGNIFICANT PERMIT MODIFICATION ☐ ADMINISTRATIVE
☒ MINOR PERMIT MODIFICATION AMENDMENT

COMPANY NAME: San Joaquin Cogen, LLC	FACILITY ID: N- 1027
1. Type of Organization: <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Sole Ownership <input type="checkbox"/> Government <input type="checkbox"/> Partnership <input type="checkbox"/> Utility	
2. Owner's Name: San Joaquin Cogen, LLC	
3. Agent to the Owner: Daniel Dunlap	

II. COMPLIANCE CERTIFICATION (Read each statement carefully and initial all circles for confirmation):

- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will continue to comply with the applicable federal requirement(s).
- ☒ Based on information and belief formed after reasonable inquiry, the equipment identified in this application will comply with applicable federal requirement(s) that will become effective during the permit term, on a timely basis.
- ☒ Corrected information will be provided to the District when I become aware that incorrect or incomplete information has been submitted.
- ☒ Based on information and belief formed after reasonable inquiry, information and statements in the submitted application package, including all accompanying reports, and required certifications are true accurate and complete.

I declare, under penalty of perjury under the laws of the state of California, that the forgoing is correct and true:



Signature of Responsible Official

15 August 2014

Date

Richard Olsen

Name of Responsible Official (please print)

Vice President, Operations

Title of Responsible Official (please print)

Appendix IV Emissions Change

Emissions Change

Emissions Change			
Pollutant	PE2 (lb/yr)	PE1 (lb/yr)	(PE2 – PE1)/4 (lb/qtr)
NOx	54,020	54,020	0
SOx	2,540	2,540	0
PM ₁₀	29,200	29,200	0
CO	105,485	105,485	0
VOC	33,945	33,945	0

Appendix V
Current Permit to Operate N-1027-1-8

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: N-1027-1-8

EXPIRATION DATE: 07/31/2019

EQUIPMENT DESCRIPTION:

GENERAL ELECTRIC LM5000 NATURAL GAS FIRED GAS TURBINE ENGINE WITH STEAM INJECTION, AMMONIA INJECTION, SELECTIVE CATALYTIC REDUCTION, AND AN OXIDATION CATALYST SERVING A 48.6 MW COGENERATION PLANT

PERMIT UNIT REQUIREMENTS

1. Operations during periods of startup and shutdown shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the emission limit shown in this permit during periods of startup and shutdown be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8 (c)] Federally Enforceable Through Title V Permit
2. Startup or shutdown periods is the time during which the exhaust gas is not within the normal operating temperature range. The duration of each start-up or each shutdown shall not exceed two hours. [District Rule 4703] Federally Enforceable Through Title V Permit
3. The SCR system shall have an effective catalyst volume of at least 904 cubic feet at all times. [District NSR Rule and District Rule 4703, 5.1] Federally Enforceable Through Title V Permit
4. The gas turbine shall be equipped with an automatic air/fuel ratio control system. [District NSR Rule] Federally Enforceable Through Title V Permit
5. Emissions from the gas turbine shall not exceed any of the following limits: 80 lbs-PM10/day, 148 lbs-NOx/day as (NO2), 7 lbs-SOx/day as (SO2), 289 lbs-CO/day and 93 lbs-VOC/day. [District NSR Rule] Federally Enforceable Through Title V Permit
6. NOx emission concentrations from the gas turbine exhaust stack shall not exceed 3.8 ppmv dry calculated to 15% O2, except during periods of startup and shutdown as defined in this permit. [District NSR Rule; District Rule 4703, 5.1; and 40 CFR Part 60.332(a)] Federally Enforceable Through Title V Permit
7. CO emissions concentrations from the gas turbine exhaust stack shall not exceed 12 ppmv dry calculated to 15% O2, except during periods of startup and shutdown as defined in this permit. [District NSR Rule and District Rule 4703, 5.2] Federally Enforceable Through Title V Permit
8. The total particulate matter (PM) emissions from the gas turbine exhaust shall not exceed 0.1 gr/dscf. [District Rule 4201] Federally Enforceable Through Title V Permit
9. Results of the CEM system shall meet all applicable requirements of CFR 60.13. [40 CFR 60.13] Federally Enforceable Through Title V Permit
10. NOx emissions concentrations measured for compliance shall be averaged over a three hour period, using consecutive 15-minute sampling periods in accordance all applicable requirements of 40 CFR Part 60. CO, PM10, VOC and SOx emissions concentrations measured for compliance shall be averaged over a 15-minute sampling period. [District Rule 1081, 4.0] Federally Enforceable Through Title V Permit
11. The ammonia slip shall not exceed 20 ppmv dry at 15% O2. [District NSR Rule] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

12. All CEMS data required to comply with the conditions in this permit shall be rounded to the same number of significant digits as the specified limits, but not less than two significant digits. [40 CFR 60.13 (h)] Federally Enforceable Through Title V Permit
13. The selective catalytic reduction (SCR) system shall be installed in the path of the heat recovery boiler where the temperature range is 575 to 750°F. The temperature of the exhaust gas leaving the catalytic oxidation reduction (COR) system shall be greater than 600°F at all times, except during periods of startup or shutdown. [District NSR Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit
14. The owner or operator shall measure and record flue gas temperature leaving the COR system during each source test while measuring VOC emissions. [40 CFR Part 64] Federally Enforceable Through Title V Permit
15. This unit shall be fired exclusively on PUC-quality natural gas which has a sulfur content of less than or equal to 0.017% by weight. [40 CFR 60.333(b) and San Joaquin County Rule 407] Federally Enforceable Through Title V Permit
16. The sulfur content of each fuel source shall be documented in a current valid purchase contract, a supplier certification, tariff or transportation contract, or tested daily in accordance with the requirements of 40 CFR 60.334 (h) and (i). [40 CFR 60.334(h) and 40 CFR 60.334(i)] Federally Enforceable Through Title V Permit
17. If the sulfur content of the natural gas being fired in the turbine is determined using daily testing, then ASTM D1072, D3246, D4468, or D6667 shall be used to make this determination. [40 CFR 60.335(b)(10)] Federally Enforceable Through Title V Permit
18. The circular cross section exhaust stack (after SCR unit) shall be equipped with permanent provisions to allow collection of stack gas samples consistent with U.S. EPA test methods and equipped with flow straighteners, if necessary, to minimize turbulence. The stack height shall be minimum of 50 feet and shall be adequate for stack sampling pursuant to EPA reference methods for source testing. The facility shall comply with this and all applicable compliance testing procedures described in District Rule 1081 (amended December 17, 1992). [40 CFR Part 60; District NSR Rule; District Rule 4703; District Rule 1081, 3.0, 5.0, and 6.0] Federally Enforceable Through Title V Permit
19. Source testing for NO_x, CO, VOC and ammonia slip shall be conducted on an annual basis. [District NSR Rule] Federally Enforceable Through Title V Permit
20. The District must be notified at least 30 days prior to any compliance source test, and a source test plan must be submitted for approval at least 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days after testing day. [District Rule 1081] Federally Enforceable Through Title V Permit
21. The owner or operator shall provide source test information annually regarding the exhaust gas NO_x and CO concentration corrected to 15% O₂ (dry). EPA Methods 7E or 20 shall be used for NO_x emissions. EPA Methods 10 or 10B shall be used for CO emissions. EPA Methods 3, 3A, or 20 shall be used for Oxygen content of the exhaust gas. [40 CFR 60.8(a) and District Rule 4703, 5.1, 6.3.1, 6.4.1, 6.4.2, and 6.4.3] Federally Enforceable Through Title V Permit
22. Unfired heat recovery steam generator turbine exhaust for the unit shall be equipped with CEMS for NO_x, CO, and O₂. CEMS shall meet the performance specification requirements in 40 CFR Part 60, Appendix F, 40 CFR Part 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the U.S. EPA. CEMS data shall be used to determine compliance with emission limits. [District Rule 1080, 4.0 and 5.0; District NSR Rule, District Rule 4703 and 40 CFR 60.13] Federally Enforceable Through Title V Permit
23. A CEMS system shall be used to demonstrate compliance with the NO_x emission limits at 30, 50, 75, and 100% of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer. [40 CFR 60.335] Federally Enforceable Through Title V Permit
24. The facility shall comply with the applicable requirements for quality assurance testing and maintenance of the CEMS equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F. [District Rule 1080, 6.0 and 40 CFR Part 60] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

25. All continuous monitoring and recording instruments shall be installed, calibrated, operated and shall be reported in accordance with the requirements of 40 CFR, Part 51. [District NSR Rule and District Rule 4001] Federally Enforceable Through Title V Permit
26. CEM cycling times shall be those specified in 40 CFR, Part 51, Appendix P, Sections 3.4 and 3.4.2, or shall meet equivalent specifications established by mutual agreement of the District, the ARB and the EPA. [District Rule 1080, 6.4] Federally Enforceable Through Title V Permit
27. The continuous NOx and O2 monitoring system shall meet the performance specification requirements in 40 CFR 60, Appendix F, 40 CFR 51, Appendix P, and Part 60, Appendix B, or shall meet equivalent specifications established by mutual agreement of the District, the ARB, and the EPA. [District Rule 1080, 6.3, 6.5, 6.6 and 7.2] Federally Enforceable Through Title V Permit
28. The owner or operator shall, upon written notice from the APCO, provide a summary of the data obtained from the CEM systems. This summary of data shall be in the form and the manner prescribed by the APCO. [District Rule 1080, 7.1] Federally Enforceable Through Title V Permit
29. On days of turbine engine startup/shutdown, permittee shall demonstrate compliance with NOx and CO daily emissions limits with CEMS data, fuel rate data, and daily hours of operation data. A written record of the compliance demonstration shall be maintained and made available for District inspection for a period of five years. [District Rule 1080, 7.1; District NSR Rule; District Rule 2520, 9.3.2, 9.4.2] Federally Enforceable Through Title V Permit
30. Except during system breakdowns, repairs and maintenance, calibration checks, and zero and span adjustments, the CEMS shall be in continuous operation while the turbine is operating. NOX emissions in ppmv (corrected to 15% O2) and CO and O2 concentrations must be recorded continuously (except as noted elsewhere) and data shall be reduced to 15-minute averages per 40 CFR Part 60.13 (e)(2). [District NSR Rule, 40 CFR 60.13] Federally Enforceable Through Title V Permit
31. Records shall be maintained and shall contain the occurrence and duration of any startup, shutdown, or malfunction; performance testing, evaluations, calibrations, checks, adjustments, any period during which a continuous monitoring system or monitoring device was inoperative, maintenance of any CEMS that have been installed pursuant to District Rule 1080; emission measurements; and daily actual local startup and stop time, length and reason for reduced load periods, total hours of operation and quantity of fuel used. [District Rule 1080, 4.0 and 7.3; District NSR Rule; District Rule 4703; 40 CFR 60.332(a), (b); 40 CFR 60.7(b)] Federally Enforceable Through Title V Permit
32. Permittee shall maintain on file copies of natural gas bills. Certification of the sulfur content by the gas supplier on the Fuel Gas Tariff will be an acceptable alternative for verifying compliance with fuel sulfur limit. [40 CFR 60.334 (b); 40 CFR 60.334(h)(3) ; District NSR Rule; District Rule 2520, 9.3.2] Federally Enforceable Through Title V Permit
33. Operators of CEMS shall submit a written report for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include time intervals, data and magnitude of excess emissions, nature and cause of excess (if known), corrective actions taken, and preventive measures adopted; averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard; applicable time and date of each period during which the CEMS was inoperative (except for zero and span checks) and the nature of system repairs and adjustments; and a negative declaration when no excess emissions occurred. For clarification, operator shall use the same averaging periods as written into the permit for demonstrating compliance. [40 CFR 60.7(c); District Rule 1080, 8.0] Federally Enforceable Through Title V Permit
34. Facility shall notify the APCO of a violation of any emission standards indicated by the CEMS within 96 hours of occurrence. The APCO shall be notified within eight hours after the detection of a breakdown of CEMS monitoring equipment and 24 hours prior to a planned shutdown of monitoring equipment greater than 4 hours in duration. [40 CFR 60.334(c); District Rule 1080, 9.0 and 10.0; District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit
35. The permittee shall provide a continuous temperature monitoring and recording system to indicate the flue gas temperature through the SCR and COR systems. [District NSR Rule and 40 CFR Part 64] Federally Enforceable Through Title V Permit

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

36. A daily log of the hourly ammonia injection rate and of the pressure drop across the catalyst shall be maintained on the premises at all times. [District NSR Rule] Federally Enforceable Through Title V Permit
37. The following types of units are not affected units subject to the requirements of the Acid Rain Program: 1) A simple combustion turbine that commenced operation before November 15, 1990, 2) Any unit that, during 1985, did not serve a generator that produced electricity for sale and that did not, as of November 15, 1990, and does not currently, serve a generator that produces electricity for sale, 3) A cogeneration facility which for a unit that commenced construction prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third its potential electrical output capacity or equal to or less than 219,000 Mwe-hrs actual electric output on an annual basis to any utility power distribution system for sale. Therefore, the requirements of 40 CFR 72.6 do not apply to this source. A permit shield is granted from this requirement. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
38. There shall be no visible emissions (except for uncombined water) from the entire system. [District NSR Rule] Federally Enforceable Through Title V Permit
39. The turbine shall be designed and operated at STIG (Trademark GE) conditions in accordance with manufacture's recommended operating procedures. [District NSR Rule, 40 CFR Part 64] Federally Enforceable Through Title V Permit
40. Per the Settlement Agreement entered into as of 06/22/1989, by and between California Attorney General John Van de Kamp and San Joaquin CoGen LLC, San Joaquin CoGen LLC is required to mitigate permitted emissions of PM10 to 0 lb/day & NOx to 85 lb/day. [District NSR Rule] Federally Enforceable Through Title V Permit
41. Turbine washing operation shall take place only when the turbine is off-line. [District NSR Rule] Federally Enforceable Through Title V Permit
42. VOC emissions from the off-line turbine wash operation shall not exceed 9.8 lb per day. [District NSR Rule] Federally Enforceable Through Title V Permit
43. Records of daily amount of organic solvent used, Material Safety Data Sheet (MSDS) or product data sheet showing the name of the organic solvent, chemical composition, boiling point, and VOC content, mix ratios by volume of components added to the cleaning solvent, shall be maintained, retained on the premises for at least five years and made available for District inspection upon request. [District Rule 1070] Federally Enforceable Through Title V Permit
44. Compliance with permit conditions in the Title V permit shall be deemed compliance with the 40 CFR 60.332(c), 60.333 (a) and (b); 60.334(b), (b)(1), (b)(2), (b)(3), (h)(1), (i), (j); 60.335(b)(10). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit
45. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements: 40 CFR 60.7(b), 60.8, 60.8(d), 60.13, and 60.13(b); District Rules 1080 (as amended 12/17/92), Sections 6.3, 6.4, 6.5, 7.0, 7.1, 7.2, 7.3, 8.0, 9.0, 10.0, and 11.0; and 1081 (as amended 12/16/93). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

These terms and conditions are part of the Facility-wide Permit to Operate.